

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawing includes a change to correct the reference numeral in Fig. 3 designating the piston rod from "60" to "62."

Attachments: Replacement Sheet of drawing including Figs. 2 and 3.
 Annotated Sheet of drawing showing change to Fig. 3 in red.

REMARKS

The Office Action includes a rejection of certain of Applicant's claims for anticipation, and a rejection of certain other of Applicant's claims for obviousness. Applicant has amended certain claims to more clearly set forth features of Applicant's technological contribution, and has added several new dependent claims directed to certain aspects of the disclosure. In view of the amendments to the claims, and for the reasons to follow, Applicant traverses the rejections included in the Office Action, and respectfully submits that the application is now in condition for allowance.

Formal Matters

The foregoing amendment sections include a number of minor amendments to the specification to improve clarity and to ensure antecedent terminology for terms in the claims, as amended. In addition, Fig. 3 of the drawing has been amended to correct a reference numeral discrepancy. No new matter has been added.

Rejection for Anticipation - Hayse

Claims 1, 2, 6, 7, and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,905,254 to Hayse ("Hayse"). While Applicant disagrees with the rejection and declines to subscribe to characterizations in the Office Action of Applicant's claims and of Hayse, Applicant has amended claim 1 to include, among other things, "a pillar connected to the frame and a column inside the pillar and extending to the axle."

In order for a reference to serve as an anticipation, the reference must disclose, either explicitly or under the principles of inherency, each and every feature of the claims rejected. See, for example, MPEP § 2131. Hayse does not disclose at least "a

pillar connected to [a] frame and a column inside the pillar and extending to [an] axle,” as recited in Applicant’s claim 1. Since Hayse does not include at least this feature, Hayse does not anticipate claim 1. Therefore, claim 1 should be allowed.

Claims 2, 7, and 8 (claim 6 having been cancelled) each depend from claim 1, either directly or indirectly, and include features in addition to those included in claim 1. Accordingly, claims 2, 7, and 8 should be allowed at least by reason of their dependency on claim 1. New claims 42-45 also depend from claim 1, either directly or indirectly, and include features in addition to those included in claim 1. Accordingly, claims 42-45 should be allowed along with claim 1.

Rejection for Obviousness - Hayse in view of Fruth

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hayse in view of U.S. Patent No. 3,331,638 to Fruth (“Fruth”). Claim 9 depends on claim 8 which in turn depends on claim 1. The Office Action does not rely on Fruth to teach “a pillar connected to [a] frame and a column inside the pillar and extending to [an] axle,” now recited in claim 1 from which claim 9 ultimately depends. Since neither Hayse nor Fruth discloses or suggests at least this claimed feature, claim 9 should be allowed at least for the same reason that claims 1 and 8 should be allowed.

Rejection for Obviousness - Hayse in view of Kinzenbaw

Claims 3-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hayse, and further in view of U.S. Patent No. 5,346,019 to Kinzenbaw et al. (“Kinzenbaw”). Claim 3 has been cancelled, and the features of claim 3 are now recited in independent claim 1, with claims 4 and 5 amended to depend from claim 1. According to the Office Action, “Hayse . . . fails to disclose a pillar connected to the

frame and a column inside the pillar.” Office Action, page 4. The Office Action then asserts that “Kinzenbaw . . . discloses a pillar (118) and a column (100b) inside the pillar (118).” Id. The Office Action concludes that “[i]t [purportedly] would have been obvious to one of ordinary skill in the art . . . to include the lifting mechanism of Kinzenbaw et al. in the implement of Hayse to make transport of the frame easier by allowing the operator to transport the frame on narrow roads.” Office Action, page 5. Applicant respectfully disagrees. The Office Action has not presented a prima facie case of obviousness.

Hayse discloses a wheel mounted tandem disc harrow including a frame 2 (e.g., title; col. 2, line 8; Fig. 1). The frame 2 includes, inter alia, members 7, 8, 9, 10, 11, and 12 (e.g., col. 2, lines 8-17; Fig. 1). Hayse’s frame also includes a rock-shaft 17 “oscillatably carried by the frame, [and] cooperat[ing] with the other members of the frame in maintaining a substantially rigid assembly when the members of the frame are connected together, as by welding or the like” (e.g., col. 2, lines 36-40; Fig. 1). Accordingly, rockshaft 17 of Hayse, although apparently movable within the members 18, 19 (not mentioned in Hayse’s description but illustrated in Fig. 1, for example), is a part of the rigid assembly forming frame 2.

Kinzenbaw discloses an implement including a lift frame 20 for raising and lowering the implement relative to a carrier frame 12 (e.g., col. 4, lines 5-28; Figs. 1b and 1c). The lift frame 20 may raise the implement to an intermediate position, for example for turning at the end of a row (e.g., col. 4, lines 58-68), and may raise implement to a fully raised position where the implement may be rotated to a transport position (e.g., col. 5, lines 1-17). As seen in Figs. 3b and Fig. 5 of Kinzenbaw, for

example, a sleeve 118 and lift post 100 are slidably arranged to enable the lift frame 20 (with implement) to raise and lower relative to the carrier frame 12 via a hydraulic cylinder 108 (see also, e.g., col. 5, line 57 to col. 6, line 9).

In order to establish a prima facie case of obviousness, there must be a clear articulation of the reasons why the claimed invention would have been obvious. See, for example, MPEP § 2142. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. Id. The proposed modification or combination of the prior art must not change the principle of operation of the prior art invention being modified. MPEP § 2143.01 VI.

The Office Action merely asserts the purported obviousness of “includ[ing] the lifting mechanism of Kinzenbaw et al. in the implement of Hayse to make transport of the frame easier by allowing the operator to transport the frame on narrow roads.” There is no rationale explaining how such a modification might be accomplished in Hayse. For example, the rock-shaft 17 (or axle) of Hayse is designed to be rigidly assembled to the frame 2 to help “in maintaining a substantially rigid assembly” (col. 2, lines 36-40), with the height of the frame 2 relative to the soil controlled by jack mechanism 75 rocking the rock-shaft 17 to swing wheels 70, 71 (e.g., col. 3, line 65 to col. 4, line 5; Figs. 1 and 3). Under the hypothetical arrangement proposed in the Office Action “to include the lifting mechanism of Kinzenbaw et al. in the implement of Hayse,” it becomes immediately apparent that such a modification would entail a complete restructuring of Hayse.

The rock-shaft 17 of Hayse, supporting the rigidly connected ground wheels 70, 71, “cooperates with the other members of the frame in maintaining a substantially rigid

assembly” (col. 2, lines 37-39), and that assembly includes the disc gangs 3, 4, 5, and 6 (e.g., Fig. 1). It is not at all apparent, and the Office Action does not explain, how one having ordinary skill in the art would “include the lifting mechanism of Kinzenbaw et al. in the implement of Hayse” as suggested in the Office Action. The unitary rigid frame assembly of Hayse, including the rock-shaft 17 with the ground wheels 70, 71, stands apart from the relatively movable frame assembly of Kinzenbaw, including lift frame 20 and carrier frame 12 with support wheels 34a-34d, as a divergent mechanical arrangement. These two disclosures (Hayse and Kinzenbaw) do not provide teachings that fit together like pieces of a puzzle. Cf. KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1742; 82 USPQ2d 1385, 1397 (2007) (“in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle”). In fact, the two disclosures are not even pieces of the same puzzle.

Neither Hayse nor Kinzenbaw discloses or suggests, and no plausible combination of Hayse and Kinzenbaw will result in, “an axle connected to [a] frame . . . [and] a piston and cylinder assembly including a cylinder connected to the frame and a movable piston rod connected to the axle . . . [and] a pillar connected to the frame and a column inside the pillar and extending to the axle . . . [and] discs attached to the frame . . . and a controller associated with the piston and cylinder assembly and configured to control movement of the frame via the piston and cylinder assembly to move the discs with the frame and to move the frame and the discs with respect to the axle,” as recited in amended claim 1.

Accordingly, a prima facie case of obviousness has not been established because any hypothetical combination of Kinzenbaw and Hayse whereby Hayse

“include[s] the lifting mechanism of Kinzenbaw” would require impermissible hindsight reconstruction of Hayse so as to change Hayse’s principle of operation. See KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. at 1742; 82 USPQ2d at 1397 (“[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning”). See again, e.g., MPEP 2143.01 VI.

Claim Amendments and New Claims

As can be seen in the foregoing claim listing, claims 3 and 6 have been cancelled and each of claims 1, 2, 4, 5, and 7-9 have been amended. The features in cancelled claim 3 have been included in independent claim 1, and the features in cancelled claim 6 have been included in dependent claim 2. New claims 41-45, directly or indirectly dependent on independent claim 1, have been included to address additional disclosed features. The amendments to claims 1, 2, 4, 5, and 7-9 have been made for clarification. Both the claim amendments and the new claims are fully supported in the specification and drawing, and introduce no new matter.

Conclusion


In view of the foregoing remarks, Applicant respectfully requests reconsideration, and allowance of claims 1, 2, 4, 5, 7-9, and 41-45. If for any reason, Examiner McGowan is of the view that a telephone discussion with Applicant’s undersigned representative might assist in advancing the prosecution of this application, then he is respectfully invited to telephone the undersigned at **571-203-2757** for such discussion.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: February 15, 2008

By: 
Clifford D. Crowder
Reg. No. 56,639

"Annotated Marked-Up Drawings"

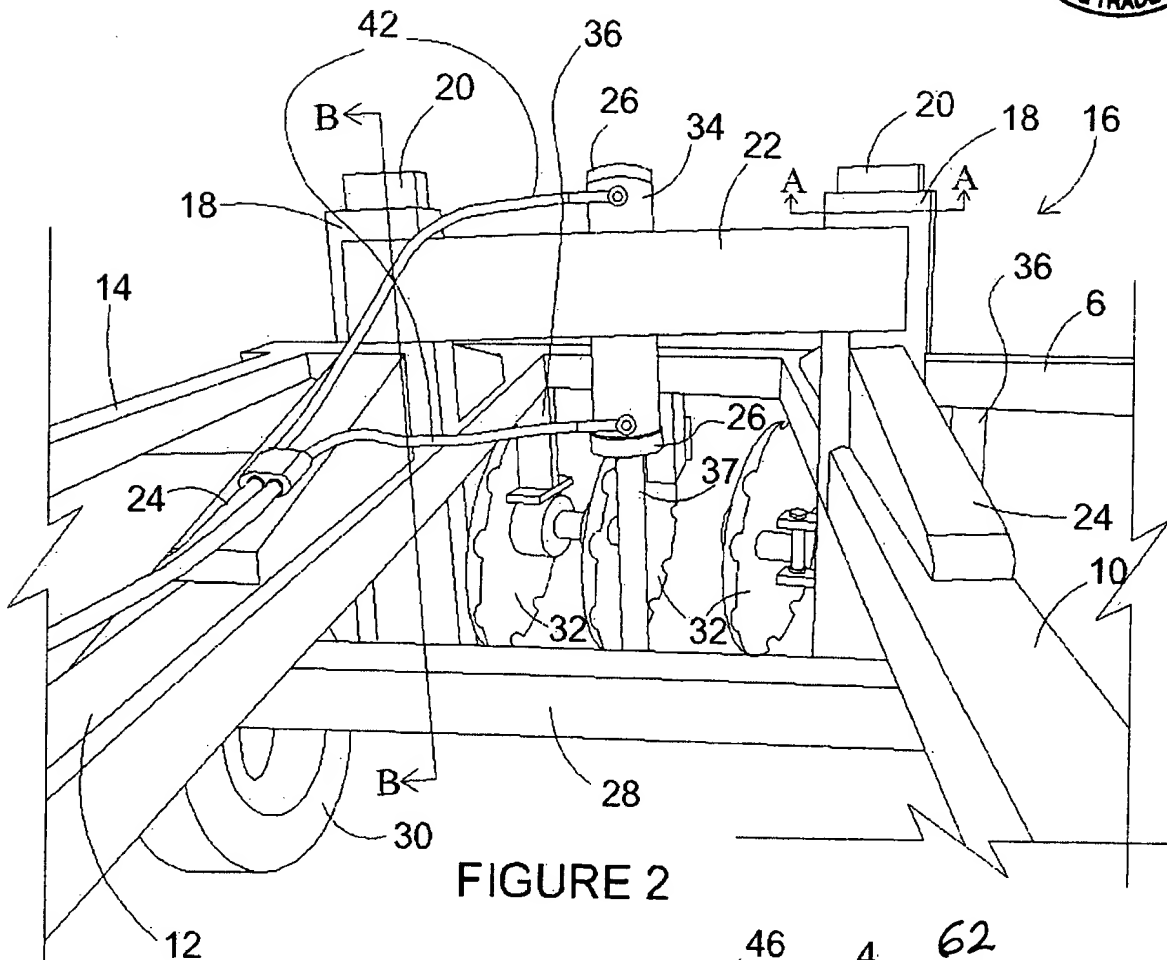


FIGURE 2

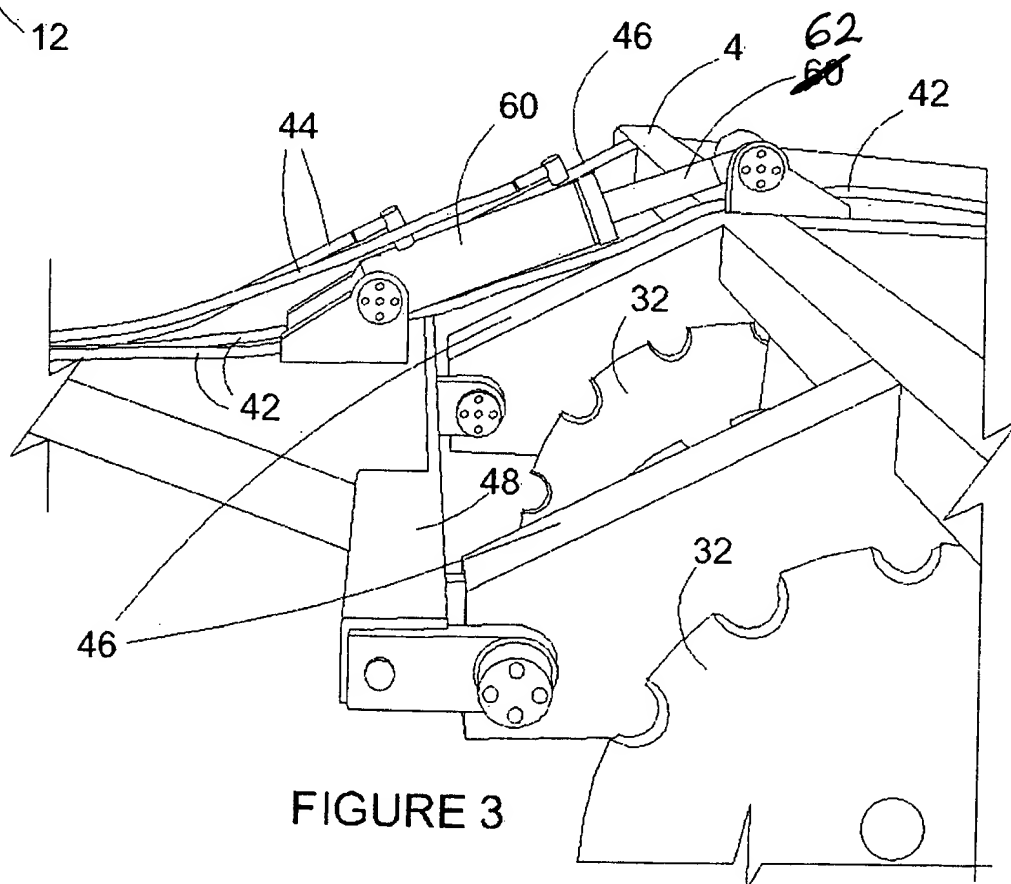


FIGURE 3